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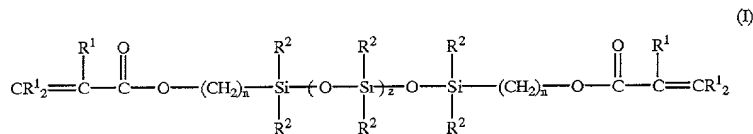
methacrylamide was recovered as a light yellow liquid at 0.5 mm Hg and 125° to 135° C. Air was bubbled through the distilled product.

23 g trimethylsilyl chloride were added dropwise over an approximately 2 hour period to a solution of 25.3 g of the above product, 30.6 g triethylamine and 75 ml CH₂Cl₂ in a three-necked flask equipped with a drying tube and a mag-

6

(trimethylsiloxy)silane or 3-methacryloxypropylbis(trimethylsiloxy)methylsilane.

5. The process of claim 1 or 3 wherein the hydrophobic siloxane prepolymer is of the formula:



netic stirrer. The mixture was kept at room temperature. After the addition, the reaction mixture was heated to 40° C. and stirred for approximately 5 hours. The mixture was then filtered to remove salt and the residual liquid was then rotovapped until the weight ceased to fall. The product was distilled under reduced pressure after addition of 500 ppm HQMME. 2-hydroxyethylmethacrylamide trimethylsilyl ether ("TMS-HMA") was collected as a clear liquid at 95 to 105° C. and 0.25 mm Hg in a yield of 42 percent.

Example 2

A blend was made of 20 parts of α,ω-bismethacryloxypropyl polydimethylsiloxane (5,000 average molecular wt), 45 parts of the TMS-HMA of Example 1 and 34 parts 3-methacryloxypropyltris(trimethylsiloxy)silane ("TRIS"), 1 part DAROCUR™ 1173, a photoinitiator that is 2-hydroxy-2-methyl-1-phenylproan-1-one, and 11 parts t-butanol. The blend was placed in polypropylene lens molds and irradiated for 30 min with UV light, then released in ethanol, and transferred into a borate buffered saline to produce soft, optically clear, oxygen permeable contact lenses.

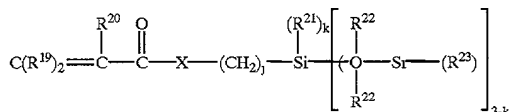
What is claimed is:

1. A process for producing a hydrogel comprising:

- a.) polymerizing a hydrophobic siloxane prepolymer and a silylated hydrophilic monomer; and
- b.) hydrolyzing the resulting polymer wherein the step a.) polymerizing is carried out by using one of heat polymerization, ultraviolet light polymerization, radiation polymerization, or a combination thereof.

2. The process of claim 1 wherein the hydrophobic siloxane prepolymer and the silylated hydrophilic monomer are polymerized with a hydrophobic siloxane monomer.

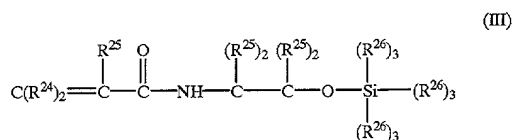
3. The process of claim 2 wherein the hydrophobic siloxane monomer is of the formula:



wherein R¹⁹ and R²⁰ are each independently hydrogen or methyl, R²¹, R²², and R²³ are each independently a monovalent alkyl of 1 to 5 carbon atoms or aryl, j=1 to 10 and k=0 to 3.

4. The process of claim 3, wherein the hydrophobic siloxane monomer is 3-methacryloxypropyltris

wherein R¹ is hydrogen or an alkyl of 1 to 5 carbon atoms, R² is an alkyl of 1 to 5 carbon atoms, n=1 to 12, and z=1 to 500 and the silylated hydrophilic monomer is of the formula:



wherein R²⁴ is hydrogen or methyl, R²⁵ is hydrogen or methyl, and R²⁶ is a monoalkyl0000.

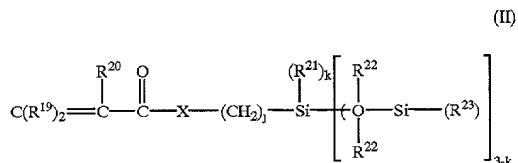
6. The process of claim 5 wherein the hydrophobic siloxane prepolymer is a α,ω-bismethacryloxypropyl macromer and the silylated hydrophilic monomer is a polyalkylsilyl ether of a hydroxyalkyl(meth)acrylamide.

7. The process of claim 6 wherein the hydrophobic siloxane prepolymer is α,ω-bismethacryloxypropyl polydimethylsiloxane and the silylated hydrophilic monomer is 2-hydroxymethacrylamide trimethylsilyl ether.

8. A hydrogel comprising a hydrophobic siloxane prepolymer and a silylated hydrophilic monomer.

9. The hydrogel of claim 8 further comprising a hydrophobic siloxane monomer.

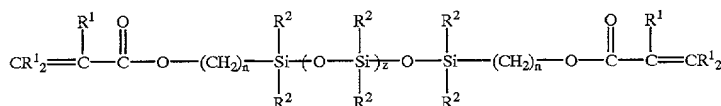
10. The hydrogel of claim 9 wherein the hydrophobic siloxane monomer is of the formula:



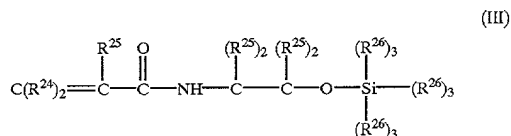
wherein R¹⁹ and R²⁰ are each independently hydrogen or methyl, R²¹, R²², and R²³ are each independently a monovalent alkyl of 1 to 5 carbon atoms or aryl, j=1 to 10 and k=0 to 3.

11. The hydrogel of claim 10, wherein the hydrophobic siloxane monomer is 3-methacryloxypropyltris(trimethylsiloxy)silane or 3-methacryloxypropylbis(trimethylsiloxy)methylsilane.

12. The hydrogel of claim 8 or 10 wherein the hydrophobic siloxane prepolymer is of the formula:



wherein R^1 is hydrogen or an alkyl of 1 to 5 carbon atoms, R^2 is an alkyl of 1 to 5 carbon atoms, $n=1$ to 12, and $z=1$ to 500 and the silylated hydrophilic monomer is of the formula:



wherein R^{24} is hydrogen or methyl, R^{25} is hydrogen or methyl, and R^{26} is a monoalkyl.

13. The hydrogel of claim 12 wherein the hydrophobic siloxane prepolymer is a α,ω -bismethacryloxypropyl macromer and the silylated hydrophilic monomer is a polyalkylsilyl ether of a hydroxyalkyl(meth)acrylamide.

14. The hydrogel of claim 13 wherein the hydrophobic siloxane prepolymer is α,ω -bismethacryloxypropyl polydimethylsiloxane and the silylated hydrophilic monomer is 2-hydroxymethacrylamide trimethylsilyl ether.

15. The hydrogel of claim 8 wherein the hydrophobic siloxane prepolymer is present in an amount of about 5 to about 70 weight percent and the amount of silylated hydrophilic monomer is present in an amount of about 2 to about 60 weight percent.

16. The hydrogel of claim 9 wherein the amount of siloxane prepolymer used is about 5 to about 70 weight percent, the amount of siloxane monomer used is from about 0 to about 70 weight percent, and the amount of silylated monomer used is from about 2 to about 60 weight percent.

17. The process of claim 1, wherein the polymerizing step a.) is carried out using ultraviolet light.

18. The process of claim 5, wherein the polymerizing step a.) is carried out using ultraviolet light.

19. The process of claim 6, wherein the polymerizing step a.) is carried out using ultraviolet light.

20. The hydrogel of claim 13 wherein the amount of siloxane prepolymer used is about 5 to about 70 weight percent, the amount of siloxane monomer used is from about 0 to about 70 weight percent, and the amount of silylated monomer used is from about 2 to about 60 weight percent.

21. The hydrogel of claim 14 wherein the amount of siloxane prepolymer used is about 5 to about 70 weight percent, the amount of siloxane monomer used is from about 0 to about 70 weight percent, and the amount of silylated monomer used is from about 2 to about 60 weight percent.

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